

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: recorded in Microsoft word 6.0 - use tabs to change cells/fields (Revised 4/2002)

STATE		FIELD OFFICE		DATE	
PRACTICE: 512 Pasture and Hayland Planting			NOTES:		
RESOURCE: SOIL RESOURCE CONCERN: EROSION			Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.		
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			Moderate to significant decrease because of increased vegetative cover. Negligible to moderate increase during establishment period depending on seedbed preparation, seeding method, and species planted.		
WIND			Moderate to significant decrease because of increased vegetative cover. Negligible to moderate increase during establishment period depending on seedbed preparation, seeding method, and species planted.		
EPHEMERAL GULLY			Slight to moderate decrease because of increased vegetative cover in watershed on long term. Potential for slight to moderate increase during establishment period depending on seedbed preparation, seeding method, and species planted.		
CLASSIC GULLY			Slight to moderate decrease because of increased vegetative cover in watershed on long term. Potential for slight to moderate increase on short term because of lack of vegetative cover during establishment period.		
STREAMBANK			Slight to moderate decrease because of improve vegetative cover in watershed on long term. Slight decrease to slight increase on short term because of lack of vegetative cover during establishment period.		
IRRIGATION INDUCED			Moderate to significant decrease because of protective vegetative cover.		
SOIL MASS MOVEMENT			Slight to moderate decrease because of soil binding by root mass and removal of soil moisture by increased transpiration.		
ROADBANK/CONSTRUCTION			Slight to significant decrease because of improved plant covers and soil binding by root mass on the watershed.		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			Moderate to significant decrease because of root development, litter accumulation, increased biological activity and reduced tillage.		
SOIL COMPACTION			Moderate to significant decrease because of root development, litter accumulation, increased biological activity and reduced tillage.		
SOIL CONTAMINATION					
<ul style="list-style-type: none"> • SALTS 			Slight decrease because planted to adapted species. Negligible decrease of selenium, boron, and heavy metals because of very limited uptake by pasture plants.		
<ul style="list-style-type: none"> • ORGANICS 			Moderate to significant decrease because of increased nutrient use by grasses and/or legumes. Slight potential for increased leaching because of improved infiltration.		

FERTILIZERS	Slight to moderate decrease because of increased use of nutrients by pasture plants when compared to nutrient use of some crops. Slight potential for increased leaching because of improved infiltration.
• PESTICIDES	Moderate to significant decrease depending on pesticide problem and change in pesticide use when land use change. Slight potential for increased leaching because of improved infiltration.
• OTHER	
DEPOSITION/DAMAGE	
• ONSITE	Slight to moderate decrease because of decreased erosion in watershed.
• OFFSITE	Slight decrease because of decreased erosion in watershed.
DEPOSITION/SAFETY	
• ONSITE	Slight decrease because of decreased erosion in watershed.
• OFFSITE	Slight decrease because of decreased erosion in watershed.
OTHER	
RESOURCE: WATER	
RESOURCE CONCERN: WATER QUANTITY	
SEEPS	Moderate decrease because of increased plant uptake and transpiration. Slight to moderate increase because of increased infiltration.
RUNOFF/FLOODING	Slight to moderate decrease because of land cover, infiltration, and retardant of runoff.
EXCESS SUBSURFACE WATER	Slight to moderate decrease dependent on species used because of increased plant uptake and transpiration.
INADEQUATE OUTLETS	Slight decrease because of providing stable outlets for disposing of excess surface water.
WATER MGT. IRRIGATION	
• SURFACE	Insignificant
• SPRINKLER	Negligible to slight decrease because of selection of plant species adapted to the amount, frequency, and availability of irrigation water.
WATER MGT. NON-IRRIGATED	Slight to moderate decrease because of selection of plant species adapted to meet the seasonal distribution of moisture.
RESTRICTED FLOW CAPACITY (H2O convey.)	
• ONSITE	Slight to significant decreased because of increased protective vegetation, reduced runoff, and the chance for land conversion.
• OFFSITE	Slight to significant decrease because of increased protective vegetation, reduced runoff, and the chance for land conversion.
RESTRICTED STORAGE	Slight to moderate decrease because of increased protective vegetation and reduced runoff.
OTHER	

RESOURCE WATER**RESOURCE CONCERN: WATER QUALITY**

RESOURCE INDICATORS	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	Slight to moderate decrease because of land use change. Slight potential for increased leaching of pesticide into ground water because of increased infiltration.
• NUTRIENTS AND ORGANICS	Slight to moderate decrease because of increased uptake of nutrients by pasture plants. Slight potential for leaching of nutrients into ground water because of increased infiltration.
• SALINITY	Slight to moderate decrease because of plant uptake when adapted pasture plant species are used. Slight potential for leaching of nutrients into ground water because of increased infiltration.
• HEAVY METALS	Negligible to slight decrease because of plant uptake when planted to adapted species. Slight potential for leaching of heavy metals into ground water because of increased infiltration.
• PATHOGENS	Slight to moderate decrease because of increased soil microbiological activity. Slight to moderate potential increase when a land use change brings in more stock or brings in more applied waste.
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	Slight to moderate decrease when change in land use and decrease of runoff because of improved vegetative cover.
• NUTRIENTS AND ORGANICS	Slight to significant decrease because of improved vegetative cover and decrease of runoff.
• SUSPENDED SEDIMENTS	Slight to moderate decrease because of improved vegetative cover and reduction of runoff and sediment.
• LOW DISSOLVED OXYGEN	Slight to moderate decrease because of decreased runoff of sediment, nutrients, and organic.
• SALINITY	Negligible decrease because of limited uptake by pasture plants.
• HEAVY METALS	Negligible decrease because of limited uptake by pasture plants.
• WATER TEMPERATURE	Negligible
• PATHOGENS	Slight decrease or increase because of changes in land use. However, negative effects of a change in land use to pasture may be offset because of improved vegetative cover and increased soil microbiological activity.
AQUATIC HABITAT SUITABILITY	Slight decrease because of improved vegetative cover, reduced sediment, turbidity, organic, and other chemicals.
OTHER	

RESOURCE: AIR**RESOURCE CONCERN: AIR QUALITY**

AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
• OFFSITE SAFETY	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
• ONSITE STRUCT. PROBLEMS	Slight to moderate decrease because of increased vegetative cover.

	Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
• OFFSITE STRUCT. PROBLEMS	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
• ONSITE HEALTH	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
• OFFSITE HEALTH	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	Slight to moderate decrease because of increased vegetative cover. Slight increase because of site disturbance during establishment period depending on method of seedbed preparation and location.
AIRBORNE CHEMICAL DRIFT	Slight to moderate increase because of potential for chemical drift and volatilization dependent on method, weather conditions, and chemicals used for weed control during establishment period.
AIRBORNE ODORS	Negligible
FUNGI, MOLDS, AND POLLEN	Slight increase because of greater variety of plants.
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	Slight to moderate decrease because of absorption of solar radiation and increased transpiration.
AIR MOVEMENT (windbreak effect)	Negligible
HUMIDITY	Slight to moderate increase because of increased transpiration.
OTHER	

RESOURCE: PLANT	
RESOURCE CONCERN: SUITABILITY	
RESOURCE INDICATORS	PHYSICAL EFFECTS
SITE ADAPTATION	Significant decrease because of selection of well adapted species.
PLANT USE	Significant decrease because of selection of species to meet needs and objectives.
OTHER	
RESOURCE CONCERN: CONDITION	
PRODUCTIVITY	Significant decrease because of proper species selected.
HEALTH, VIGOR, SURVIVAL	Significant decrease because of proper species selected and management for establishment.
OTHER	
RESOURCE CONCERN: MANAGEMENT	
ESTAB., GROWTH, HARVEST	Significant decrease because of proper species selection and planting techniques.
NUTRIENT MANAGEMENT	Significant decrease because of application of proper plant nutrients during establishment.
PESTS	Significant decrease because of control of pest during establishment
THREAT/ENDANGERED PLANTS	Significant decrease because of control of pest during establishment

[illegible]

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	N/A
PRIVATE/PUBLIC VALUES	N/A
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	N/A
SIGNIFICANCE OF CULTURAL RESOURCES	N/A
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	N/A
OTHER	